

AMENDMENTS TO THE CLAIMS

1-7. (Cancelled)

8. (Currently Amended) A neuromodulation therapy system comprising:
at least one implantable stimulation lead ~~[[to]]~~ for delivering of electrical energy to proximately positioned tissue;

an implantable pulse generator coupled to the at least one stimulation lead, wherein the implantable pulse generator is operable to deliver electrical energy to the at least one stimulation lead in response to at least one control signal, and wherein an electrical contact ~~operably electrically~~ couples the at least one implantable stimulation lead to the implantable ~~pulse generator~~ receiver, the electrical contact comprising:

a conductive disk ~~having an inner aperture~~, wherein the conductive disk is operably coupled to the implantable ~~pulse generator~~ receiver; and

a plurality of conductive projections extending ~~away inwardly~~ from ~~a the inner aperture perimeter~~ of the disk, ~~wherein the plurality of conductive projections are generally planar relative to an orientation of the conductive disk~~, wherein the conductive projections flex to receive the at least one implantable stimulation lead and electrically couple to a respective terminal of a plurality of terminals within of the at least one implantable stimulation lead.

9. (Currently Amended) The system of claim 8, wherein tension exerted by flexing the conductive projections maintains the at least one implantable stimulation lead in a fixed position relative to the conductive disk ~~the first set of electrical terminals~~.

10. (Original) The neuromodulation therapy system of Claim 8, wherein the conductive projections of the electrical contact flex elastically.

11. (Currently Amended) The neuromodulation therapy system of Claim 8, wherein the electrical contact[[,]] further comprises a plurality of projections at ~~the~~ an outer perimeter of the conductive disk which ~~operable~~ couple the conductive disk to a housing header wherein the housing header is ~~operable~~ electrically coupled to the implantable pulse generator receiver.

12. (Original) The neuromodulation therapy system of Claim 8, wherein the projections are comprised of a shape memory alloy.

13. (Original) The neuromodulation therapy system of Claim 11, wherein the stimulation lead provides a stimulation pattern from an applied electric field and comprises:
a body having a first surface;
a plurality of electrodes positioned relative to the first surface of the body; and
a plurality of conductors, wherein a conductor electrically couples one terminal of the plurality of terminals with at least one electrode.

14. (Currently Amended) A method to ~~operably~~ couple an implantable lead to a tissue stimulation device that comprises;
~~operably~~ coupling a conductive disk ~~having an inner aperture~~ to the tissue stimulation device, wherein the conductive disk possesses a perimeter and a plurality of conductive projections that are disposed in a generally planar manner relative to an orientation of the conductive disk and that extend inwardly from the perimeter of the conductive disk; and
receiving the implantable lead with ~~[[a]]~~ the plurality of conductive projections ~~extending away from the inner aperture of the disk,~~ wherein the conductive projections flex and electrically couple to a plurality of terminals ~~within~~ of the implantable lead.

15. (Currently Amended) The method of Claim 14, wherein the tension exerted by flexing the conductive projections maintains the implantable lead in a fixed position relative to the conductive disk ~~first set of electrical terminals.~~

16. (Original) The method of Claim 14, wherein the conductive projections flex elastically.

17. (Currently Amended) The method of Claim 14, wherein ~~operably~~ coupling the conductive disk to the tissue stimulation device further comprises ~~operable~~ coupling a plurality of projections at the an outer perimeter of the conductive disk to a ~~housing header~~ wherein the ~~housing header~~ is ~~operable~~ electrically coupled to the tissue stimulation device.

18. (Original) The method of Claim 14, wherein the projections are comprised of a shape memory alloy.

19. (Original) The method of Claim 14, wherein the stimulation lead provides a stimulation pattern from an applied electric field and comprises:
a body having a first surface;
a plurality of electrodes positioned relative to the first surface of the body; and
a plurality of conductors, wherein a conductor electrically couples one terminal of the plurality of terminals with at least one electrode.

20. (Original) The method of Claim 14, wherein the tissue stimulation device comprises an implantable receiver to deliver electrical stimulation signals to the implantable lead in response to a control signal.

21-23. (Cancelled)

24. (New) An implantable pulse generator, comprising:
circuitry for generating electrical pulses;
a housing for storing the circuitry for generating electrical pulses; and
a header for receiving a stimulation lead, the header comprising a respective
conductive disk for each terminal of the stimulation lead for coupling a respective electrode
of the stimulation lead to the circuitry for generating electrical pulses, wherein each
conductive disk possesses a perimeter and a plurality of flexible projection elements that are
disposed in a generally planar manner relative to an orientation of the respective conductive
disk and that extend inward from the perimeter;
wherein upon insertion of the stimulation lead into the header, the flexible projection
elements flex and apply a force against the stimulation lead to hold terminals of the
stimulation lead against the conductive disks.

25. (New) The implantable pulse generator of Claim 24 wherein the flexible
projection elements of the conductive disks possess arcuate distal ends for contacting the
electrodes of the stimulation lead.

26. (New) The implantable pulse generator of Claim 24 wherein tension exerted by
flexing the flexible projections maintains the stimulation lead in a fixed relative position to
the header.

27. (New) The implantable pulse generator of Claim 24, wherein the flexible
projections of the electrical contact flex elastically.

28. (New) The implantable pulse generator of Claim 24, wherein the conductive disk
further comprises a plurality of projections at an outer perimeter of the conductive disk which
electrically couple the conductive disk to the header.

29. (New) The implantable pulse generator of Claim 24, wherein the flexible
projections are comprised of a shape memory alloy.

30. (New) An implantable pulse generator, comprising:
circuitry for generating electrical pulses;
a housing for storing the circuitry for generating electrical pulses; and
a header for receiving a stimulation lead, the header comprising a plurality of electrical contacts for coupling with respective terminals of a stimulation lead, wherein each of the plurality of electrical contacts comprises:

a cylindrical band structure for electrically coupling with the circuitry for generating via a feed-through conductor; and

a conductive disk that comprises (i) a first plurality of flexible projection elements that are disposed in a generally planar manner relative to an orientation of the respective conductive disk and that extend inward from a perimeter of the conductive disk and (ii) a second plurality of projection elements that generally extend in a perpendicular direction from the conductive disk that electrically and mechanically couple to conductive disk to the cylindrical band structure;

wherein upon insertion of the stimulation lead into the header, the flexible projection elements flex and apply a force against the stimulation lead to hold terminals of the stimulation lead against the conductive disks.

31. (New) The implantable pulse generator of Claim 31, wherein the flexible projection elements of the conductive disks possess arcuate distal ends for contacting the electrodes of the stimulation lead.

32. (New) The implantable pulse generator of Claim 31, wherein tension exerted by flexing the flexible projections maintains the stimulation lead in a fixed relative position to the header.

33. (New) The implantable pulse generator of Claim 31, wherein the flexible projections of the electrical contact flex elastically.

34. (New) The implantable pulse generator of Claim 31, wherein the flexible projections are comprised of a shape memory alloy.